A Numerical Analysis to the π and K Coupled-Channel Scalar Form Factor

LIU Wei, ZHENG Han-Qing and CHEN Xiao-Lin

Department of Physics, Peking University, Beijing 100871, China

Abstract: A numerical analysis to the scalar form factor in the $\pi\pi$ and KK coupled-channel system is made by solving the coupled-channel dispersive integral equations by the iteration method. The solutions are found not to be unique. Physical application to the $\pi\pi$ central production in the pp$\rightarrow$pp$\pi\pi$ process is discussed based upon the numerical solutions we found.

[Full text: PDF]

Close